



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,032	07/11/2003	Kenichi Hiraoka	239802US0CONT	2705

22850 7590 10/05/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

KUHNS, SARAH LOUISE

ART UNIT PAPER NUMBER

1761

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/617,032

Applicant(s)

HIRAOKA ET AL.

Examiner

Sarah L Kuhns

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear as to whether the fish is still alive when it is washed or neutralized. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1-3, 5-10, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneyasu et al., JP 09271786 A, in view of Highfill, U.S. Patent 4,962,728 and Bender et al., U.S. Patent 5,262,186.

In regard to claims 1 and 8, Kaneyasu discloses a process for treating fresh fish, comprising keeping living fish in an aqueous alkali solution (abstract). It is unclear from the abstract whether the fish are ever washed or neutralized. Highfill also discloses a process for treating live fish comprising keeping living fish in an aqueous alkali solution

Art Unit: 1761

(column 1, line 64), but does not disclose the washing or neutralizing of the fish.

However, Bender teaches the treatment of fish with an alkali solution as well. Bender additionally discloses that the fish can be washed with and/or neutralized with acid following the alkali treatment (column 5, line 45). It should be noted that the use of alkali salts and their applicability prior and post processing of fish and shellfish is well known. Alkali salts such as sodium hydroxide, sodium carbonate, and disodium and trisodium phosphate are commonly used. For instance Kaneyasu teaches utilizing the alkali solution to regulate pH of water to prevent deterioration. Bender teaches the use of an alkali salt solution to reduce, remove, retard, or control bacteria without causing organoleptic depreciation. Highfill uses alkali salt solution to extend the survival time of live fish during confinement. It would be obvious to wash and/or neutralize the fish to remove the aqueous alkali solution after treatment is complete. The alkali salts that remain on the fish will continue to prevent the growth of bacteria, as taught by Bender, but washing off the excess solution will help to avoid altering the taste or appearance of the fish product.

In regard to claims 2 and 9, the abstract of Kaneyasu does not disclose specific species of fish. However, Bender discloses that treatment with an alkali solution can be performed on any fish (column 4, line 4) and specifically discloses salmon (column 4, line 10).

In regard to claims 3 and 10, the Kaneyasu discloses dissolving an alkali (magnesia based material) in water (abstract) to obtain the alkali solution.

In regard to claims 4 and 11, it is unclear from the abstract of Kaneyasu as to what may specifically be used as the magnesia based material. However, Bender discloses the use of phosphate salt (column 3, line 53), and specifically sodium phosphate (column 3, line 67), in the aqueous alkali solution. Also, Highfall discloses the use of sodium hydroxide (column 2, line 61), sodium carbonate (column 2, line 62), and sodium phosphate (column 2, line 69) in an aqueous solution for treating live fish. It would therefore be obvious to use sodium phosphate, sodium hydroxide, or sodium carbonate as the alkali in the treatment solution because these chemicals are readily available, economical, and will provide an environment for the fish that is much less conducive to supporting bacterial growth.

In regard to claims 5-7 and 12-14, the abstract of Kaneyasu does not disclose the exact pH of the alkali solution. Bender discloses a preferred pH range of 11.6-13.5 (column 4, line 63). It would therefore be obvious to use such a pH for the alkali solution in order to ensure that all bacteria present is killed or at least greatly reduced.

3. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneyasu et al., JP 09271786 A, in view of Bender et al., U.S. Patent 5,262,186, as applied to claim 8 above, in further view of Furuta, et al., JP 56148260 A.

Kaneyasu fails to disclose the pickling of fish gut in salt. However, pickling the eggs of fish in salt is well known in the field as evidenced by Furuta. Furuta teaches the pickling of fish eggs in saline water and also discloses the roe of salmon and trout in the form of Sujiko or Ikura (abstract). Since these products are well known in the field it would be obvious to use the fish treated with the alkali solution for this purpose,

Art Unit: 1761

especially since the treatment maintains the freshness of the fish for a longer period of time and these products are made from raw fish.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah L. Kuhns whose telephone number is 571-272-1088. The examiner can normally be reached on Monday - Friday from 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SLK


MILTON I. CANO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700